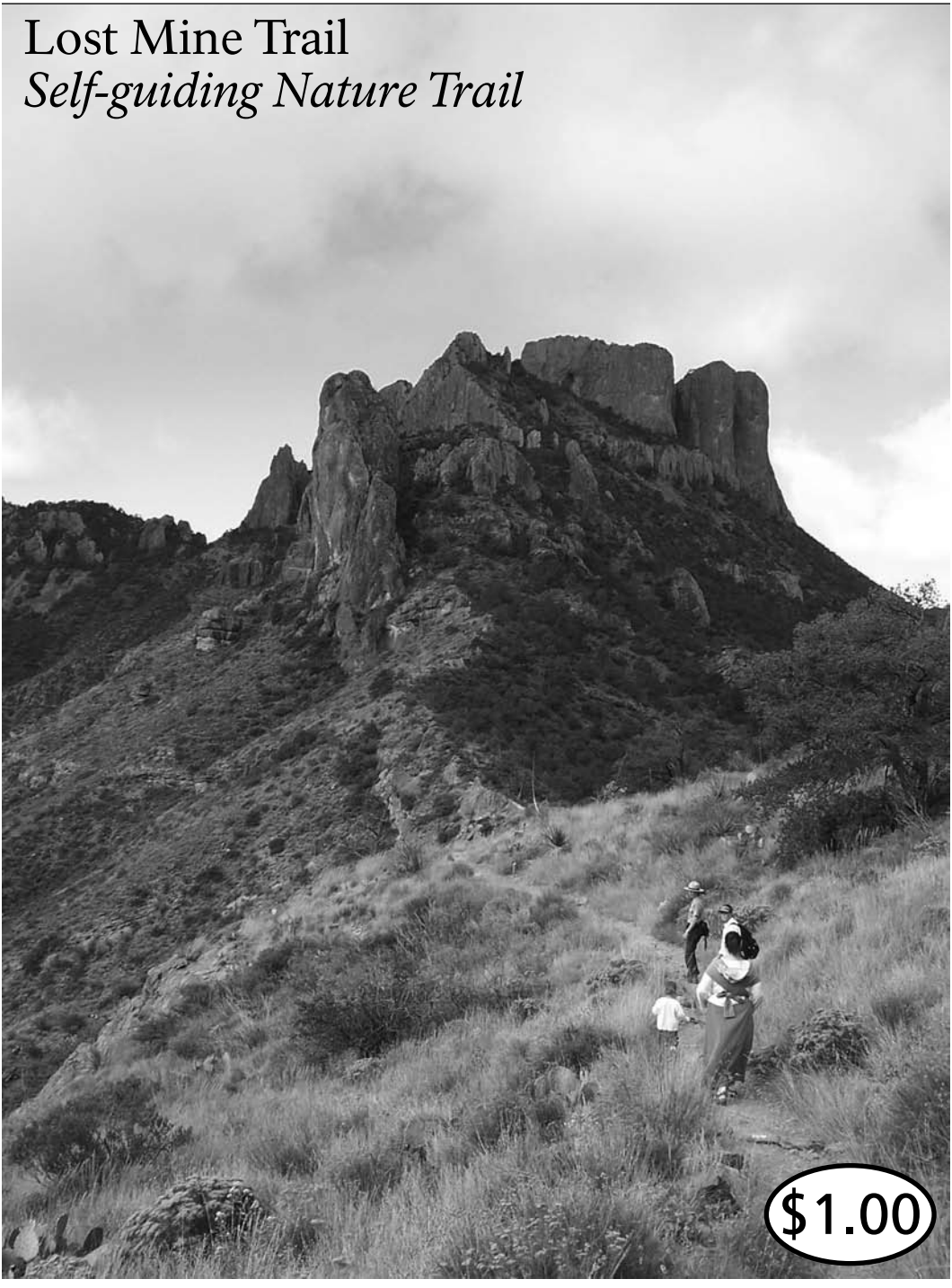
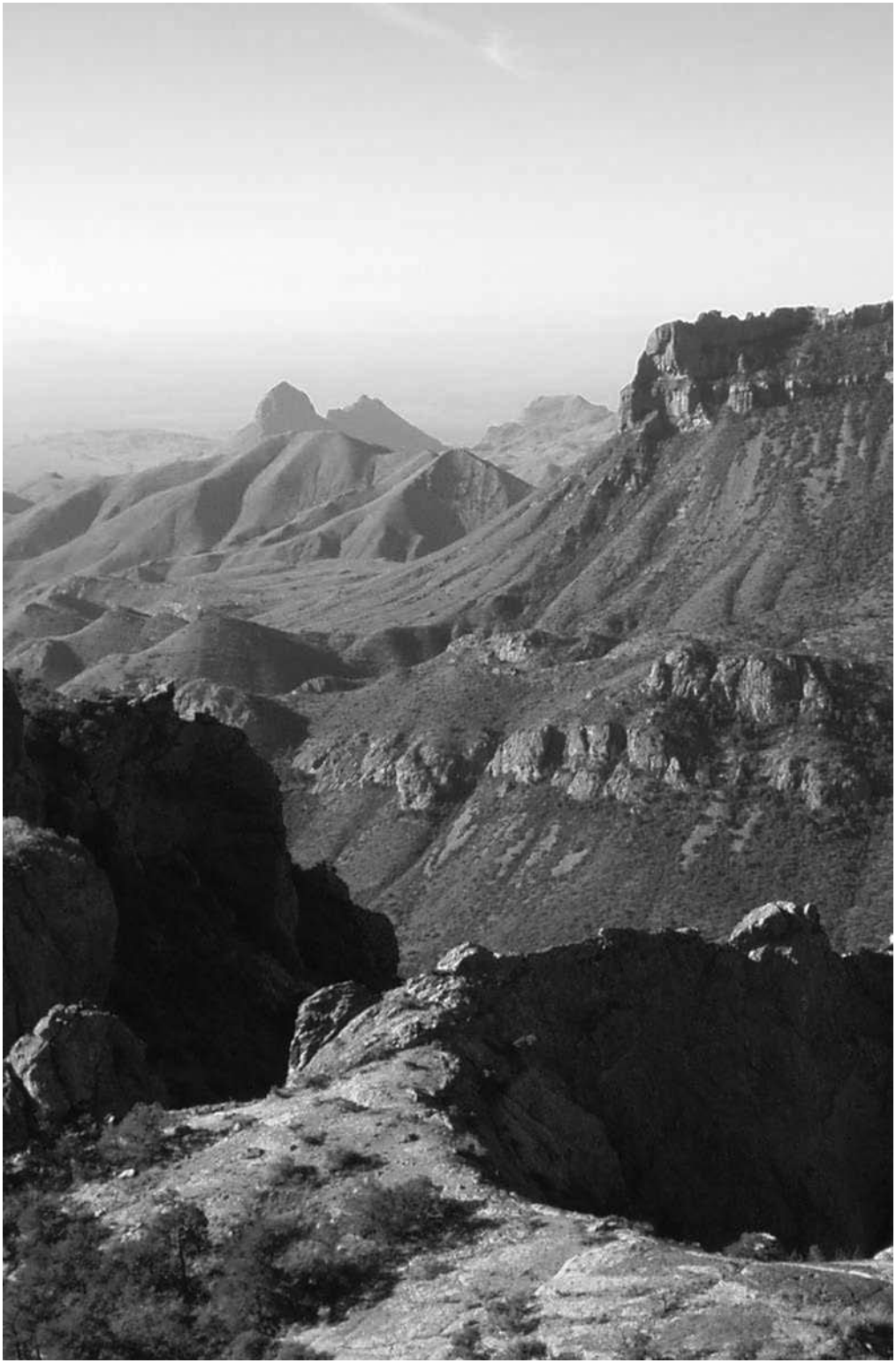
National Park Service
U.S. Department of the Interior

Big Bend National Park

Lost Mine Trail
Self-guiding Nature Trail





The top of the Lost Mine Trail affords a spectacular view of Juniper Canyon, the Northeast Rim of the Chisos Mountains, and on into Mexico.

The Lost Mine Trail

From the very first step, the Lost Mine Trail leads hikers into a different world—a woodland-grassland ecosystem with some of the best scenic views in the park. Walk this trail and learn why so many park staff and visitors alike list it as their favorite hike in Big Bend National Park.

Trail Basics

The Lost Mine Trail rises 1,100 feet over 2.4 miles (4.8 miles round-trip) and provides excellent views of the surrounding mountains and desert. The average time to complete this trail is around three hours, so take plenty of water and a snack.

Hike Safely

• *This is mountain lion and black bear country!* Keep children close to you; do not let them hike alone or run ahead of the group. If you see a mountain lion, *do not run*.
• To improve your hiking experience, it is important to carry and drink plenty of water.
• Protect yourself from the desert sun, even up in the mountains; use sunscreen and wear a wide-brimmed hat.
• Know your limits. Take breaks as needed, and enjoy the view.

Trail Tips

• If your time or energy is limited, consider hiking only the first mile to a scenic overlook at marker #10.
• Parking at the trailhead is limited; during busy periods you may have to hike another trail and come back to the Lost Mine another time. *Do not attempt to park along the side of the road*.
• The Lost Mine is an excellent hike at all times of day, as the climb often leads to cooler temperatures at higher elevations.
• The upper portion of the trail is steep; help prevent erosion by staying on the trail and following switchbacks.
• **There are no toilets along this trail.** Human waste must be buried six inches deep, at least 100 yards from the trail or any water source or drainage. Be sure to pack out your toilet paper; it should not be buried, and burning it is prohibited. *Being prepared for the trip is just as important as enjoying your visit.*
• Respect other visitors and protect the quality of their experience. Be courteous. Yield to other users on the trail. Let nature's sounds prevail.

Marker #1
Mexican piñon pine is one of the most common evergreens in the Chisos Mountains. Its seeds provide food for many types of animals, from squirrels to foxes to black bear. This tree's range in the U.S. is confined to west Texas. You'll see the much larger ponderosa pines if you hike into Boot or Pine Canyon.

Marker #2
About 17 species of oaks are found in the Chisos Mountains. They can be difficult to identify due to their tendency to hybridize between species. On your right is Graves oak; its leaves turn scarlet in the fall before dropping off. To the left is Emory oak, and across the trail behind you is gray oak.

A number of birds and mammals eat the acorns from these oaks. The acorn woodpecker, common in the Chisos Mountains, gets its name from its habit of drilling holes in trees and then pounding acorns into them for a winter food supply.

Marker #3
Note how the bark of the alligator juniper is squared off in sections resembling an alligator's hide. This is the largest of the three species of junipers found in the Chisos Mountains; the largest specimen found in the park is nearly eight feet in diameter. You see the other two species further up the trail.

Marker #4
The Civilian Conservation Corps built this stone culvert and other masonry structures along the trail. From 1934 through 1937, the first group of CCC surveyed and laid out the Basin Road using only hand tools and a dump truck, in the process moving 40,000 cubic yards of earth and 5,000 yards of solid rock. The stone culverts along the road and this trail are excellent examples of their craftsmanship. From 1940 to 1942, a second group of CCC built the stone cottages in the Basin. From 1933 until 1944, the area was part of a state park.

Marker #5
Stipa grass, grama grass, and other grasses grow abundantly in certain parts of the Chisos Mountains. They supported the ranching industry that flourished here in the early 1900s.Today they provide food for deer and smaller wildlife, and hold fragile soil in place.

Periodic wildfires help to maintain this ecosystem of grasses and trees; grass fires return nutrients to the soil and create clearings for tree seedlings to grow. Without fires, brush accumulates and chokes out seedlings and grasses, changing the overall ecology of the area.

Marker #6
The Mexican drooping juniper, or weeping juniper, is the most common juniper in Mexico, but in the U.S. it is found only in the Chisos Mountains. The major portion of its range is in Mexico and extends from Chihuahua south to Oaxaca and Guatemala. It always appears wilted, no matter how much rainfall it receives. The tree usually grows to 25 to 30 feet tall, although it can be up to 55 feet.

Marker #7
Sweet-smelling white flowers give fragrant ash its name, but the clusters of long, flat, winged seeds may be the tree's most unusual feature. Ash wood is used for furniture, oars, axe handles, and baseball bats.

Beneath the ash is fragrant or skunkbush sumac. Gently rub a leaf to release the strong odor that gives the plant these names. The leaves turn yellow, orange, or red in the fall, adding bursts of color to the Chisos Mountains.

About 10 feet to the left and to the right of the ash are mountain mahogany trees. Look for the distinctive herringbone pattern on the leaves. The feathery coiled tails on the seeds give the tree an overall shaggy appearance and help to drive the seeds into the ground.

The Juniper Canyon Overlook at marker #10 is an excellent stopping point for a shorter hike, and provides excellent views of Casa Grande, Toll Mountain, the Northeast Rim of the Chisos and upper Juniper Canyon.

Marker #8
The rock turrets of Casa Grande loom to your left, while directly ahead, the rounded dome of Vernon Bailey Peak forms the north rim of the Window. Pulliam Ridge, ahead on the right, forms the north side of the Basin. These and the rest of the Chisos Mountains are all igneous rock, created from volcanic activity millions of years ago.

Geologists have identified the eroded remains of two long-extinct volcanoes near the Chisos Mountains: the Pine Canyon Caldera to the southeast, and the Sierra Quemada Caldera to the southwest.

Marker #9
Dense vegetation on mountain slopes holds water and prevents soil erosion. Careless hikers cutting across trail switchbacks cause soil erosion and permanent scars.

Remember, plants grow by the inch but die by the foot. Please help protect this area by staying on trails.

Marker #10
10,000 years ago the climate was cooler and wetter, and the woodland ecosystem around you would have covered the landscape as far as the eye can see. As the climate slowly became warmer and drier, the woodland species could no longer survive in the lower elevations, and more desert-adapted species moved in to take their place. Today, mountains like the Chisos protect small relict populations of once-widespread plants, animals, and other organisms that are isolated here by the surrounding desert.

Marker #11
This branching plant is often mistaken for a cactus, but it is really in a family all its own. Ocotillo conserves water by shedding its leaves during dry periods. It grows new leaves after rainfall, sometimes within 48 hours of heavy rain, and retains them as long as it has adequate moisture. Each spring, a cluster of red flowers grows at the tip of each branch. Watch for hummingbirds feeding on these flowers.

Madrone near the top of the trail.

Marker #12
Sotol has long slender leaves with sharp teeth along the margins. It sends up a tall grassy bloom stalk every year. Mexicans distill a fiery alcoholic drink, also known as sotol, from its juice. American Indians wove the leaves into baskets and mats.

Marker #13
More species of cacti have been identified in Big Bend National Park than in any other national park. Prickly pear cactus are the most common cacti found here. Shallow surface roots collect all available water, which the cactus stores in thick waxy-covered pads, or stems. These pads are a good source of moisture, fiber, and nutrients for animals that can brave the spines. Rodents bite into the edges of the pads between the spines, while javelinas have tough mouths that allow them to eat the entire pad, spines and all. The juicy ripe purple fruits are also a good food source.

Marker #14
The vertical grooves in the stems of the strawberry pitaya allow them to expand like an accordion to store water. Like all cacti, the pitaya's leaves have been modified into spines that provide some shade and protection from predators while reducing moisture loss that would otherwise occur from fleshy leaves. Pitayas produce vivid pink to fuchsia flowers each spring, followed by juicy purplish fruits that taste like strawberries.

Marker #15
Lechuguilla is an indicator plant of the Chihuahuan Desert, meaning it only grows in this region. After storing nutrients for 5-10 years, it sends up a bloom stalk that may be 15 feet tall. Like the agave, the entire plant dies after blooming. It reproduces primarily by sending out rhizome-like offshoots. The plant's tough fibers are used in making twine and rope, sacks, mats, cushions, and brushes.

The bright blue Mexican jay is a year-round resident of the Chisos Mountains, often seen on the Lost Mine Trail.

Marker #16
As its name suggests, each cone on the one-seed juniper contains only one seed. You can identify it by the process of elimination: a juniper that does not droop or have alligator-scale bark is a one-seed juniper.

Marker #17
Evergreen sumac has shiny green leaves virtually year-round. It is not a true evergreen; the leaves are green through the winter, then are dropped, to be replaced with a new crop. Its fragrant white flowers attract bees and butterflies in late summer, and birds and other wildlife eat the fuzzy red-orange berries in the fall. American Indians made a drink from the tart berries.

Marker #18
Nolina, also known as beargrass or basketgrass, closely resembles sotol, but its leaf edges have a rough sandpapery feel instead of little teeth. Nolina sends up a short grassy bloom stalk every year. As with the sotol, American Indians also used the long slender leaves of nolina to make baskets, sandals, and mats.

Marker #19
From right to left are Casa Grande, Toll Mountain, and the Northeast Rim. Initially formed from volcanic activity, the Chisos Mountains have also been shaped by faulting and erosion. Researchers continue to study these and other formations throughout the park to learn more about the geologic processes that formed this landscape.

Marker #20
Agaves, or century plants, grow for up to 20 years before reproducing. In their final month, they grow a huge flowering stalk up to 15 feet tall. The yellow flowers attract nectar-feeding bats, hummingbirds, and many types of insects. The plant dies after blooming. Similar species of agaves are grown commercially in Mexico to make tequila.

Marker #21
Texas madrone is one of the most distinctive trees in the mountains. Its old bark peels off in thin sheets each year, revealing smooth white bark that later turns pink or red. Deer, bear, and birds feed on its bright red berries in the fall.

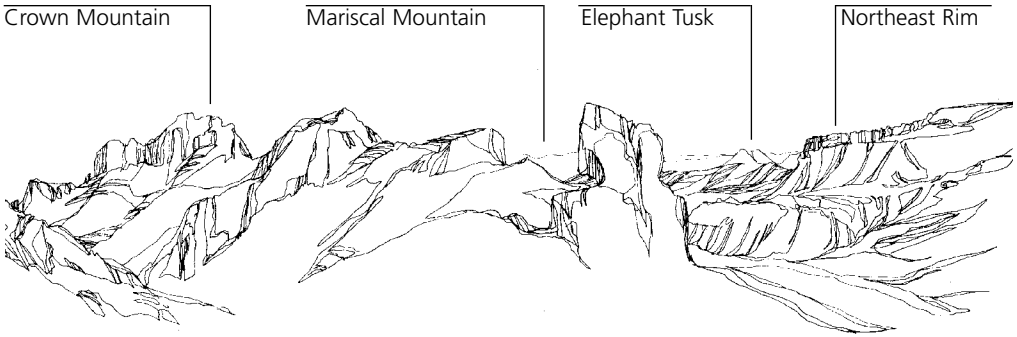
The claret cup cactus is the most prominent cactus in the Chisos Mountains. Look for its bright red blooms in the spring.

Marker #22
Claret cup cactus is closely related to the strawberry pitaya seen earlier, but grows only at high elevations. Its name comes from the bright, waxy reddish-orange flowers seen each April and May. Hummingbirds are its primary pollinators.

Marker #23
The colorful lichens on the rocks here consist of a fungus and an algae in a symbiotic relationship. Because they absorb nutrients from rainwater, they are particularly vulnerable to air pollution. Sulfates, in particular—the predominant form of air pollution in the Big Bend region—kill the algae, so dead lichens are an early warning sign of harmful air pollution. Studying lichens can tell us about the levels and types of air pollution. Look for more lichens on the rocks and trees as you continue your hike.

Marker #24
Lost Mine Peak, at 7,650 feet elevation, dominates the skyline across Upper Pine Canyon from here. The peak's name comes from an old legend that describes how Spanish explorers found a vein of silver in this area and enslaved local people to mine it. According to the legend, the workers eventually rebelled and killed their captors, then sealed the mine entrance to prevent further exploitation. There is no evidence to support this legend, and geologists don't believe that silver would form in these rocks. However, the name adds an air of mystery to this mountain.

The trail continues from here along the top of the ridge that separates Upper Pine and Juniper Canyons. It ends shortly at a small rock outcrop where steep drop-offs prevent you from safely hiking any further.



The View from the Top

Visitors often ask how the Chisos Mountains got their name. While we don't know the answer for certain, there are many theories. The most romantic one states that Spanish explorers called these mountains "hechizos," which means 'enchanted' in Castilian Spanish. This was later shortened to "Chisos." Sitting here at the end of the trail, it is easy to imagine how majestic and entrancing these mountains would have seemed to explorers who had traveled hundreds of miles across the vast desert. The Chisos Mountains, and the Lost Mine Trail in particular, continue to enchant hikers every day.

The National Park Service was established on August 25, 1916. . . "*to conserve the scenery and the natural and historic objects and the wildlife. . . and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.*"

Authorized by congress in 1935, and established in June 1944, Big Bend National Park preserves the most representative example of the Chihuahuan Desert ecosystem in the United States.

As conservation educators, the park's Division of Interpretation and Visitor Services provides guided walks, talks, evening slide programs, workshops, and other educational activities as well as written materials such as this trail guide.

The Big Bend Natural History Association, established in 1956 as a private, non-profit organization, champions the mission of the National Park Service in facilitating popular interpretation of the scenic, scientific, and historic values of Big Bend and encourages research related to those values. The Association conducts seminars and publishes, prints, or otherwise provides books, maps, and interpretive materials on the Big Bend region. Proceeds fund exhibits, films, interpretive programs, seminars, museum activities, and research.

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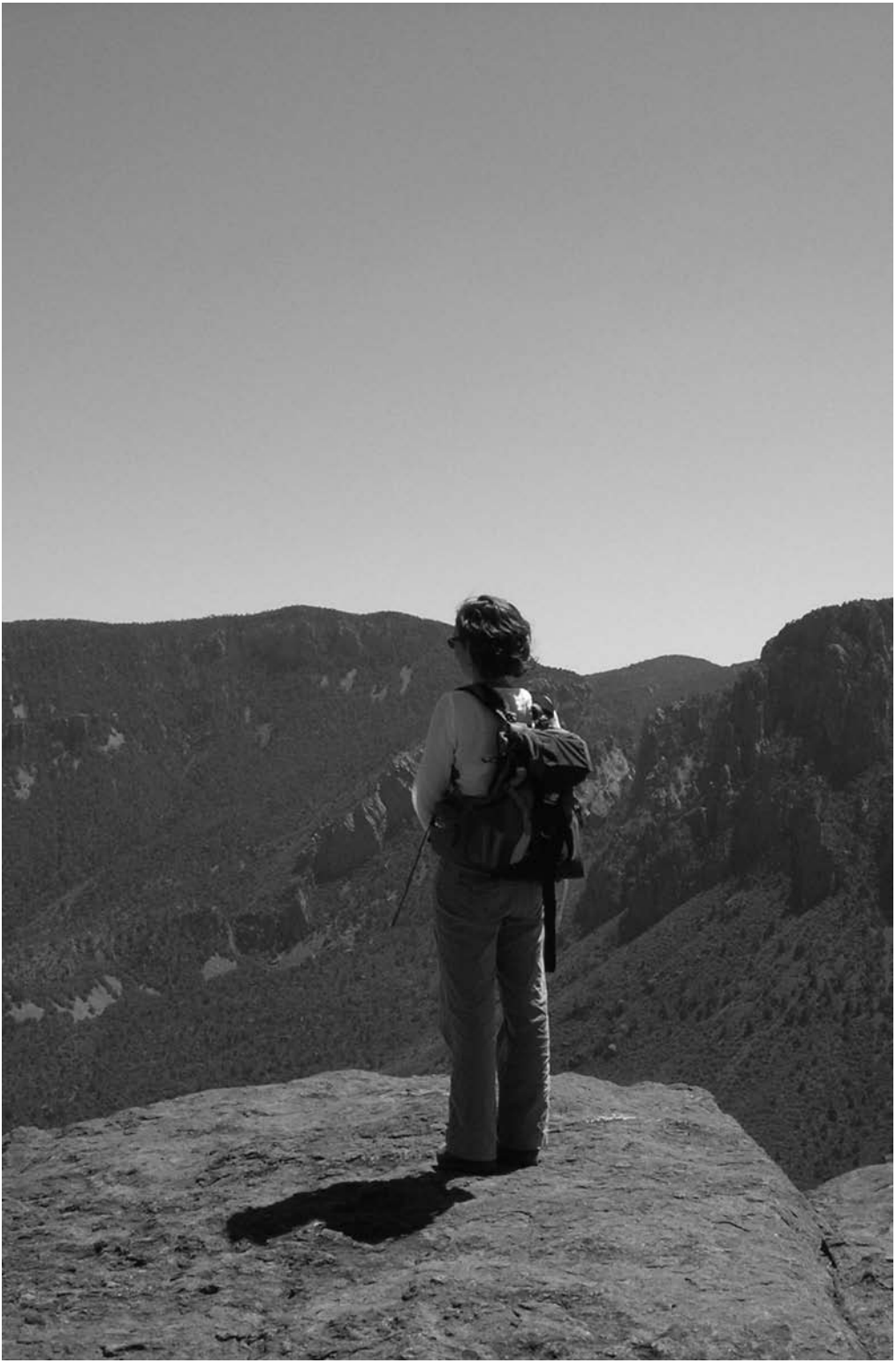

At the top of the trail, a lone hiker stops to take in the view.

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